



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,665	02/15/2001	Yiqun Wang	1001.1412101	2225

28075 7590 09/11/2003

CROMPTON, SEAGER & TUFTE, LLC
1221 NICOLLET AVENUE
SUITE 800
MINNEAPOLIS, MN 55403-2420

EXAMINER

FERKO, KATHRYN P

ART UNIT

PAPER NUMBER

3743

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/784,665

Applicant(s)

WANG ET AL.

Examiner

Kathryn Odland

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 8-13, and 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by McIntyre et al. in US Patent No. 5,334,153.

McIntyre et al. disclose a catheter assembly (generally 1) having a first tube having a proximal end, a distal end, and a first lumen (5) extending therethrough, wherein the lumen is in fluid communication with an expandable member (8) proximate the distal end of the first tube, as recited in column 5, lines 30-65 and seen in figures 1 and 4; a first port (such as at 20) on the proximal end of the first tube in fluid communication with the first lumen, as recited in columns 5 and 6; and a seal (26/28) releasably attached to the first port so as to substantially prevent the passage of air into the first lumen, wherein the first lumen has a pressure less than atmospheric pressure, as stated in column 2, lines 60-67 and column 7; an expandable member is a balloon (8), as recited in column 4, line 14; a seal that is a polymer, as recited in column 5, lines 55-60 and column 6, lines 1-3; a seal that is rubber, as recited in column 5, lines 55-60 and column 6, lines 1-3, wherein rubber is one of the suitable materials disclosed; a seal that is a self-sealing rubber septum, as recited in column 5,

lines 55-38 and column 6, lines 1-3; a seal that is plastic, wherein latex encompasses plastic; a catheter assembly that prior to use the first lumen is filled with a fluid, as recited in column 7; a balloon catheter (1) with a proximal end and a distal end, having a first tube having a proximal end, a distal end, and a first lumen (5) extending therethrough, wherein the first tube includes a first port (generally at 20) on a proximal end thereof in fluid communication with the first lumen; a balloon (8) disposed at the distal end of the catheter and in fluid communication with the first lumen, as recited in columns 1 and 2; a seal (26/28) releasably attached to the first port so as to substantially prevent the passage of air into the first lumen wherein the first lumen is substantially free of air therein, as recited in column 5, lines 50-68 and column 6, lines 1-3; a method of preparing a balloon catheter (1) via providing a balloon catheter including a first tube having a proximal end, a distal end, and a first lumen (5) extending therethrough, wherein the first tube has a first port (generally at 20) in fluid communication with the first lumen, and a seal (26/28) releasably attached to the first port so as to substantially prevent the passage of air into the first lumen with a balloon disposed proximate the distal end of the catheter in fluid communication with the first lumen, as recited in column 5; providing a sealing device that is detachably connectable to the first port, wherein the sealing device includes a seal detachably secured therein, as recited in column 5 and seen in figure 1; connecting the sealing device to the first port; using the sealing device to pull vacuum until the air pressure within the first lumen is substantially less

than atmospheric pressure followed by placing the seal over the first port; and disconnecting the sealing device from the first port, as recited in column 2, lines 60-68, column 5, column 6, and column 7.

3. Claims 1, 2, 8, 9, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Lafontaine et al.

Lafontaine et al. disclose a catheter assembly (generally 40) having a first tube having a proximal end, a distal end, and a first lumen (31) extending therethrough, wherein the lumen is in fluid communication with an expandable member proximate the distal end of the first tube, as recited in columns 5-7; a first port (such as at 27) on the proximal end of the first tube in fluid communication with the first lumen, as recited in column 6; and a seal (46) releasably attached to the first port so as to substantially prevent the passage of air into the first lumen, wherein the first lumen has a pressure less than atmospheric pressure, as stated in columns 6-7; an expandable member is a balloon, as recited in column 5; a catheter assembly that prior to use the first lumen is filled with a fluid, wherein functional language is not given patentable weight in apparatus claims; a balloon catheter (40) with a proximal end and a distal end, having a first tube having a proximal end, a distal end, and a first lumen (31) extending therethrough, wherein the first tube includes a first port (such as at 27) on a proximal end thereof in fluid communication with the first lumen; a balloon disposed at the distal end of the catheter and in fluid communication with the first lumen; and a seal (46) releasably attached to the

first port so as to substantially prevent the passage of air into the first lumen wherein the first lumen is substantially free of air therein, as recited in columns 5-7.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7, 14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over by McIntyre et al. in US Patent No. 5,334,153.

McIntyre et al. disclose the invention with the exception of a first tube that includes a chemical coating capable of binding a quantity of CO.sub.2, N.sub.2, and O.sub.2. On the other hand, coatings are well known in the art and it would be obvious to one with ordinary skill in the art to modify the invention to include a coating that is capable of binding a quantity of CO.sub.2, N.sub.2, and O.sub.2 for the purpose of preventing escape of air and other gases, as discussed in column 1, lines 25-40.

6. Claims 3-7, 10-14 and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lafontaine et al. in US Patent No. 5,647,847.

Lafontaine et al. disclose the invention with the exception of explicitly reciting a seal that is a polymer, a seal that is rubber, a seal that is self-sealing

rubber septum a seal that is plastic, or a first tube that has a coating. On the other hand, Lafontaine et al. teach a self-sealing seal. Thus, those previously recited are common for self-sealing seals and thus, would be obvious to one with ordinary skill in the art. Further, coatings are well known in the art and it would be obvious to one with ordinary skill in the art to modify the invention to include a coating that is capable of binding a quantity of CO.sub.2, N.sub.2, and O.sub.2 for the purpose of preventing escape of air and other gases. Moreover, given the structure the method would fall within the scope and be obvious to one with ordinary skill in the art as an appropriate method to purge the system.

7. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being obvious over Hansen in US 6,575,937.

The applied reference has a common assignment with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer

in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

8. Claims 1-21 rejected under 35 U.S.C. 103(a) as being obvious over Rauker et al. in US Patent No. 6,475,185.

The applied reference has a common assignment with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned

by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

9. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being obvious over DiCaprio et al. in US Patent No. 6,176,843.

The applied reference has a common assignment with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Conclusion

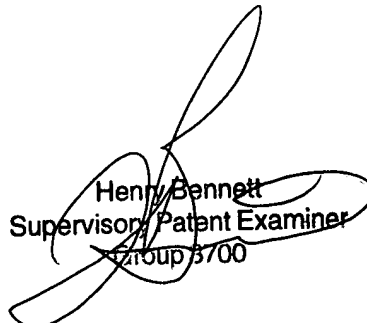
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are as follows: US Patent No. 6,572,591; US Patent No. 6,533,782; US Patent No. 6,344,033; US Patent No. 6,302,839; US Patent No. 6,261,282; US Patent No. 6,158,458; US Patent No. 5,904,6448; US Patent No. 5,507,732; US Patent No. 5,336,192; US Patent No. 5,224,933; and US Patent No. 3,799,171.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathryn Odland whose telephone number is (703) 306-3454. The examiner can normally be reached on M-F (7:30-5:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A Bennett can be reached on (703) 308-0101. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

KO


Henry A Bennett
Supervisory Patent Examiner
Group 3700